

### REMARKS

Claims 1, 4, 5 and 21 are currently pending in the subject application and are presently under consideration. A version of the claims is found at pages 2-4. Independent claims 1 and 21 have been amended herein. Support for the amendments to claims 1 and 21 can be found at least at page 12, lines 7-12 of the instant specification. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

#### **I. Rejection of Claims 1, 4, 5 and 21 Under 35 U.S.C. §103(a)**

Claims 1, 4, 5 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Coffee RA (WO 98/03267), in view of Coffee RA (US 2001/0003148), in further view of Coffee RA (US 6,252,129). Applicant's representative respectfully requests that this rejection be withdrawn for at least the following reasons. The cited references, either alone or in combination, do not teach or suggest all aspects of the subject claims.

The claimed invention relates to the use of electroprocessed fibrin for engineered biological tissue applications. In particular, amended independent claims 1 and 21 recite similar aspects, namely electrodeposited fibrin matrix with cells, wherein the cells are delivered to the matrix during fabrication of the electrodeposited fibrin matrix, wherein the cells are suspended in a solution comprising molecules capable of forming fibrin during delivery to the matrix, and wherein *a cross-linking agent is added to the electrodeposited fibrin matrix*. The cited references do not disclose such aspects of the claimed invention.

Coffee RA (WO 98/03267) generally relates to applying material to a surface, and more specifically, applying material to skin for use in the care of treatment of wounds or burns. In one aspect, Coffee fabricates a material using an electroprocessing method, wherein the material can be used for treating skin. However, for example, Coffee does not contemplate further applying a cross-linking agent to the electroprocessed matrix material. As a consequence, Coffee RA does not teach or suggest all aspects of amended independent claims 1 and 21.

The Examiner provides Coffee RA (US 2001/0003148) in an attempt to compensate for the deficiencies of Coffee RA (WO 98/03267). Coffee RA (US 2001/0003148) relates to electrohydrodynamic fiber formation generally, and more specifically is directed to applying the fibers to various types of surface compositions. However, US 2001/0003148 does not further disclose crosslinking the electrohydrodynamically-deposited fibers.

Furthermore, Coffee RA (6,252,129) does not make up for the drawbacks of the two previously discussed cited references. The cited reference relates to combining liquid emanating from two nozzles into one solid stream for subsequent electrohydrodynamic fiber deposition. However, US 6,252,129 does not further teach or suggest crosslinking the deposited fibers after deposition. Therefore, the cited references, either alone or in combination, do not teach or suggest all aspects of the subject claims. Accordingly, this rejection should be withdrawn.

**CONCLUSION**

In view of the foregoing remarks, Applicants submit that the pending claims are in condition for allowance. Early and favorable reconsideration is respectfully solicited. The Examiner may address any questions raised by this submission to the undersigned at (617) 832-1000. If any fees are due, the Commissioner is hereby authorized to credit any overpayment or charge any deficiencies to Deposit Account No. **Deposit Account No. 06-1448, Reference No. OGA-007.03.**

Respectfully submitted,

FOLEY HOAG LLP

Dated: March 3, 2008

***Customer No: 25181***

Patent Department

Foley Hoag, LLP

155 Seaport Blvd.

Boston, MA 02210-2600

/Beth E. Arnold/

Beth E. Arnold, Esq.

Reg. No. 35,430

Attorney for Applicants